

Product datasheet for **RG216420**

RAD1 (NM_002853) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	RAD1 (NM_002853) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	RAD1
Synonyms:	HRAD1; REC1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG216420 representing NM_002853 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGCCCTTCTGACCCAACAGATCCAAGACGAGGATGATCAGTACAGCCTTGTGGCCAGCCTTGACAACG
TTAGGAATCTCTCCACTATCTTGAAAGCTATTCATTTCCGAGAACATGCCACGTGTTTCGCAACTAAAA
TGGTATCAAAGTAACAGTGGAAAATGCAAAGTGTGTGCAAGCAAATGCTTTTATTCAGGCTGGAATATT
CAGGAGTTTAAAGTTCAGGAAGAGTCTGTTACTTTTCGAATTAATTTAACTGTCCTTTTAGACTGTTTAT
CTATTTTGGATCAAGTCTATGCCAGGACTTAACTGCACTTCGAATGTGTTACCAAGTTATGGTTA
CCCTTTGATGCTGTTCTGGAAGAAGGAGGAGTGGTGACAGTCTGCAAAATCAATACACAGGAACCTGAG
GAGACCCTGGACTTTGATTTCTGCAGCACCAATGTTATTAATAAAAATTATTCTGCAGTCAGAGGGCTCC
GTGAAGCATTTTCTGAATTGGATATGACGAGTGAAGTCTACAAATTACCATGTCTCCTGACAAGCCTTA
TTTCAGGTTATCTACTTTTGGAAATGCAGGAAGTCCCACCTTGACTATCCCAAAGATTCTGATTTGATG
GAAGCATTTTCTGTAATCAGACCCAAGTCAACAGATACAAGATTTCTTACTGAAACCTCTACAAAGG
CATTAGTCTATCTTGAAGGTATCTATTCGGACAGATAACAGAGGCTTCCTTTTACAGTATATGAT
TAGAAATGAAGATGGACAAATATGTTTTGTGGAATATTACTGCTGCCCTGATGAAGAAGTTCTGAACT
GAGTCT

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >RG216420 representing NM_002853
 Red=Cloning site Green=Tags(s)

MPLL TQQIQDEDDQYSLVASLDNVRNLSTILKAIHFREHATCFATKNGIKVTVENAKCVQANAFIQAGIF
 QEFKVVQEE SVTFRINLTVLLDCLSI FGSSPMPGTLTALRMCYQGYGYPLMLFLEEGGVVTVCKINTQEPE
 ETLDFDFCSTNVINKIILQSEGLREAFSELDMTSEVLQITMSPDKPYFRLSTFGNAGSSHLDYPKDS
 DLM EAFHCNQTVNRYKISLLKPKSTKALVLSCKVSI RTDNRGFLSLQYMIRNEDGQICFVEYYCCPDEE
 VPES

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_002853

ORF Size: 846 bp

OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:

1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

RefSeq: [NM_002853.4](#)

RefSeq Size: 1776 bp

RefSeq ORF: 849 bp

Locus ID: 5810

UniProt ID: [O60671](#)

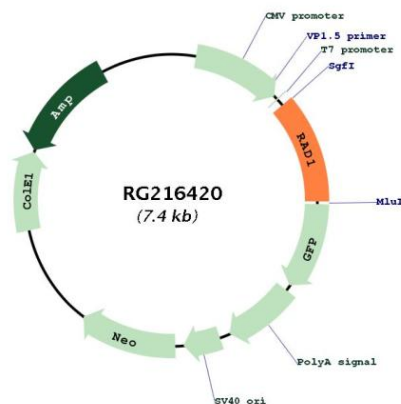
Cytogenetics: 5p13.2

Domains: Rad1

Protein Families: Druggable Genome

Gene Summary: This gene encodes a component of a heterotrimeric cell cycle checkpoint complex, known as the 9-1-1 complex, that is activated to stop cell cycle progression in response to DNA damage or incomplete DNA replication. The 9-1-1 complex is recruited by RAD17 to affected sites where it may attract specialized DNA polymerases and other DNA repair effectors. Alternatively spliced transcript variants of this gene have been described. [provided by RefSeq, Jan 2009]

Product images:



Circular map for RG216420